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MAKAH TRIBE

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RE:

Makah Indian Tribe Comments On Washington State DNR's Final Habitat Conservation Plan (HCP) for Forest Practices and NOAA's and USFWS's Final Environmental Impact Statement for this Forest Practice HCP

Executive Summary:

The Makah Indian Tribe is submitting these comments on both the Washington State Department of Natural Resources (DNR) Habitat Conservation Plan (HCP) for Forest Practices and the National Oceanic & Atmospheric Administration's (NOAA) and U.S. Fish and Wildlife Service's (USFWS) joint Environmental Impact Statement (EIS) for this HCP. We previously submitted comments during the review period for the draft of these two documents. Since most of our comments on the Draft HCP and EIS documents were only noted and not transferred into significant document changes, we have attached similar comments below. Some of our concerns were not addressed in both final plans because of the nature of the comments and the inability of the Federal Services to address the allocation of funds in the State of Washington's HCP. Our concerns are still important and we will address them again in the upcoming review of the biological opinion of the HCP.

Regarding the upcoming review of the biological opinion, the Makah Tribe requires sufficient time to fully review the biological opinion. We feel that 30 days is a minimum amount of time to give adequate consideration to the volume of work expected to be contained in the biological opinion. In addition to sufficient notice for the review of the biological opinion, we encourage NOAA to ensure timely section 7 consultation with the Makah Tribe.

The HCP will be the document governing the habitat upon which fish depend in the Makah Tribe's Usual and Accustomed Hunting and Fishing Area (U&A). The welfare of the land, which supports the spiritual, cultural, and economic well being of the Tribe, is of paramount importance.

Since the Draft HCP and EIS were issued, the Makah Tribe has become aware that funding for Tribal participation in the Forest and Fish Agreement and State Adaptive Management Program will be cut, with future cuts potentially into the future. Without an assurance of funding from either the state of Washington or NOAA for the adaptive management program and tribal monitoring programs, we assert that the HCP will not be implemented as written. This has been highlighted in our previous comments and is reiterated here. Without funding for tribal participation, the Forest and Fish Agreement will not work as agreed and therefore the HCP based on it cannot be guaranteed. Since the 1999 Forest and Fish Agreement and even previously during the Timber Fish and Wildlife Process, Tribes throughout the State of Washington were instrumental in ensuring that research, monitoring and adaptive management were conducted. In many ways, Tribal participation in these programs dominated their functionality. Recent funding cuts and loss of staff in 2005/2006 have highlighted the importance of Tribal participation in these programs, as their functionality has been compromised by these cuts. We are confident that the Section 10 determination will outline the importance of funding and Tribal participation. This funding issue is an obscuring issue because it takes focus away from the main issues of lack of substance in the HCP, outlined below.

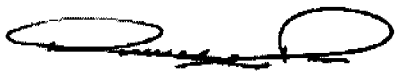
Although today's rules have improved over those of the past, the Makah Tribe is not convinced that these rules and this conservation plan go far enough to protect what exists today, fifty years into the future, let alone begin to reverse decades of destruction that have already taken place. Our experiences here in the Makah U&A are the basis of this viewpoint and these comments. The Makah Tribe, along with most other Tribes in the State, has strong concerns over the Forest and Fish Report's (FFR) inadequacy to recommend sound scientific principles to protect Tribal fisheries or ESA species. Furthermore, the Tribes co-management role of fish resources has not been fully respected by the State of Washington's current or past management programs, especially in the forest practices forum dealing with freshwater habitat integrity and fish production.

At a minimum, no Federal Assurances or Endangered Species Act (ESA) coverage should be given until a full and detailed evaluation is conducted of the functionally and effectiveness of DNR's Forest Practice Program and Adaptive Management Program, both on-the-ground and at the science and policy level. Furthermore, ESA Federal Assurances should not be given to the DNR Forest Practice program and private landowners until 2009, when water quality trends and Clean Water Act (CWA) compliance are scheduled to be fully evaluated by the Environmental Protection Agency (EPA).

From local Forest Practice experiences, the Makah Tribe has developed concerns with the State of Washington's wherewithal to implement existing state law and protect Tribal Treaty resources. These concerns stem from the State's general lack of funding and staffing, problems with enforcement and compliance monitoring, lack of sufficient water quality and sediment pollution protection measures, and incomplete implementation of aquatic habitat protection measures. On-the-ground examples are given that highlight specific issues with resource protection and the State of Washington.

Finally, the Makah Tribe believes the EIS has major flaws in many of its analyses. Specifically, these flaws include: the use of incomplete economic data analysis to justify selection of the HCP alternatives, incorrect assumptions that the RMAP process will be fully implemented and lead to sediment reduction, an insufficient consideration of the full range of effects of global climate change, and insufficient coverage of the limiting factors to the production of Lake Ozette Sockeye, a threatened species under ESA severely affected by Forest Practices.

Sincerely,



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I. Introduction:

The Makah Indian Tribe is submitting these comments on both the Washington State Department of Natural Resources (DNR) Habitat Conservation Plan (HCP) for Forest Practices and the National Oceanic & Atmospheric Administration's (NOAA) and U.S. Fish and Wildlife Service's (USFWS) joint Environmental Impact Statement (EIS) for this HCP. We previously submitted comments during the review period for the draft of these two documents. Since most of our comments on the Draft HCP and EIS documents were only noted and not transferred into significant document changes, we have attached similar comments below. Some of our concerns were not addressed in both final plans because of the nature of the comments and the inability of the Federal Services to address the allocation of funds in the State of Washington's HCP. Our concerns are still important and we will address them again in the upcoming review of the biological opinion of the HCP.

Regarding the upcoming review of the biological opinion, the Makah Tribe requires sufficient time to fully review the biological opinion. We feel that 30 days is a minimum amount of time to give adequate consideration to the volume of work expected to be contained in the biological opinion. In addition to sufficient notice for the review of the biological opinion, we encourage NOAA to ensure timely section 7 consultation with the Makah Tribe.

The Makah Tribe has concerns regarding the assumptions and analysis used to determine the need for an Incidental Take Permit, and regarding the ability of Washington State agencies to enforce the Forest Practices Rules. NOAA and the USFWS should not support an HCP that is based on the current Forest Practice Rules and Adaptive Management Program. These foundations of the HCP have not been proven to effectively protect fish and wildlife resources. The positive effects of the implementation of the current Forest Practices Rules on harvestable fish supply have not yet been observed, nor are the results of habitat and water quality effectiveness studies and monitoring yet available. Studies completed by CMER to date (e.g., DFC and PIP) have not tested the adaptive management process through to rule change. The outcomes of the science of these studies have been stalled and incompletely implemented into numerical rule change due to political manipulation. In practice on the ground, the monitoring and enforcement of the Forest Practice Rules does not occur to the satisfaction of existing State Law and these problems need to be remedied first. In addition, the Makah Tribe's fisheries co-manager role has not been fully respected and utilized in the Forest Practice forum.

II. Habitat Conservation Plan Elements of Concern

II.1 CONCERNS WITH ASSUMPTIONS

A federal permit for incidental take of all species listed in the next 50 years as threatened or endangered should not be justified on the basis of providing regulatory certainty for the forest industry. If future monitoring of fish species result in a threatened or endangered listing, and the cause of the listing is related to forest management activities, the activities in question should be subject to restriction. The Adaptive Management

Program has not been proven to 'appreciably reduce the likelihood of the survival and recovery of the species in the wild' (ESA) through a quick and effective response to impacting activities. Relying solely on a program that is neither quick nor responsive to mitigate endangered species impacts is not acceptable. Fish need 'regulatory certainty' that they will be protected into the future, not assurances that if their populations continue to decline to the point that they are become listed, that they will continue to be 'taken'.

In contrast to the pressure by the timber industry for 'regulatory certainty', there is no regulatory certainty for the Tribe and other stakeholders who are concerned about timber lands remaining on the landscape for fifty years. There are no requirements in the HCP prohibiting timberlands from development. The conversion from forestland to other developed uses is used to justify the selection of the HCP as the most viable alternative. There are other factors besides 'regulatory certainty' over forest practices which can cause a conversion from forest land including: the global price of raw timber, pulp, and saw logs; mechanization impacts on employment; labor or technology costs; corporate agglomeration; fuel prices; public preferences; etc.

The arguments against selection of HCP Alternative 1 are not valid; the HCP states that 1) ESA compliance may not be reached under Alternative 1, and 2) a harvestable supply of fish may not be achieved. If it will be a challenge to follow a federal law and achieve a harvestable supply with the current rule package, then the rules and/or goals should be changed. The rules should stand by themselves to achieve their stated goals and an incidental take permit should not be issued in order to achieve compliance for questionable rules. The EIS states that "providing take authorization as a result of the State's application would be a major step towards achieving the goals of the Forest and Fish Report". However, it would only be a major step towards two of the four goals of the Forest and Fish Report (FFR): 1) To achieve compliance with the Endangered Species Act for aquatic and riparian dependent species on non-Federal Forestlands, and 2) To keep the timber industry economically viable in Washington. Granting an incidental take permit and HCP will not inherently move the Forest Practices towards achieving the other two goals: 3) To restore and maintain riparian habitat to support a harvestable supply of fish on non-Federal forestlands, and 4) To meet the requirements of the Clean Water Act for water quality on non-Federal forestlands.

II.2 CONCERNS WITH ANALYSIS

Increasing the habitat impacts by 570,000 riparian acres above the minimal effects strategy critical area determination is excessive. The Makah Tribe cannot accept that impacts to ESA species from increased riparian disturbance will be merely incidental. We also cannot agree that future listed species should be considered exempt from legal imperatives to aid their recovery, particularly considering the amount of deviation in the HCP from the minimal effects strategy. As an example, we disagree with allowing additional reductions in LWD supply by replacing some of the minimal impact strategy critical areas with Channel Migration Zones. In the HCP, LWD recruitment over the long term, compared to the minimal effects strategy, is reduced but justified because "reductions in outer zone recruitment due to harvest are not expected to substantially affect overall recruitment, as this zone represents only about ten percent of potential

woody debris inputs. In addition, the protection of CMZs as no-harvest areas mitigates the effects of reduced wood recruitment from the outer zone along those channels where CMZs are present" (HCP page 238). On HCP page 234, it states that the minimal effects strategy defines and protects critical areas on fish bearing streams so that "No management activity is allowed within CMZs and RMZs under the minimal effects strategy". Using CMZ's as a justification for additional land base for timber harvesting above the minimal effects strategy appears inconsistent with the restoration and maintenance of riparian habitat to support the FFR goal: to support a harvestable supply of fish goal. Washington State certainly should not use CMZs as justification for increased harvesting of the outer zone.

Another case where the minimal effects strategy should have been followed is for type Np buffers. The minimal effects strategy analysis protected the entire length of Np waters and the HCP protects 50% of the length. The effect of unbuffered type-4 streams on temperature was observed by Caldwell as stated on HCP page 242; his study showed violations of water quality standards in type-4 streams that were not buffered in 3 out of 11 cases. The HCP considers these data, which shows increases in temperature in 27% of cases, support for the current practices requiring only 50% length buffered on type-4 streams (type Np). The Caldwell study is part of a set of studies which "suggest that the combination of RMZs, sensitive site buffers and unstable slopes buffers should be effective in minimizing and mitigating temperature effects in Type Np waters." (page 243). There is enough uncertainty around this issue that CMER has prioritized temperature studies on Type N buffers (Type N Buffer Characteristics, Integrity and Function Program). If the HCP does not protect the entire length to prevent temperature increases in the face of data that shows temperature increases and a high degree of uncertainty, we doubt that results from any adaptive management study that shows adverse temperature effects from short buffers will be implemented. The HCP should be edited to reflect the precautionary principle as a theoretical basis and use the minimal effects strategy in these two cases before an incidental take permit is issued.

For years, basic sound science and best available science has been ignored or subjectively applied to rule making and adaptive management due to political influence (e.g., failure to incorporate basic riparian management zone width research). This continues today in the Adaptive Management Program, where scientific questions, research topics, and project sites are strongly filtered by the timber industry to meet their objectives. Furthermore, it is apparent that the body of scientific knowledge the USFWS and NOAA cite throughout the EIS for all alternatives of the HCP is not fully incorporated into the existing Forest Practice Rules and HCP Alternative 2, let alone applied on the ground within the Makah Usual and Accustomed Hunting and Fishing Area (U&A). Since 1999, the new emergency and final Forest Practice Rules, the adaptive management process, and on the ground implementation and enforcement of these rules have not protected habitat critical to the recovery and sustained natural production of salmonids or other aquatic species.

II.3 CONCERNS WITH TRIBAL CO-MANAGEMENT ROLE

The Makah Tribe has a treaty-reserved right to co-manage the fish resources in their Usual and Accustomed Hunting and Fishing Area (U&A). The Makah Tribe does not have confidence that the riparian and aquatic habitat protected according to the HCP will be enough to ensure a harvestable supply of fish for the Makah to sustainably manage. We would like to see the Tribe described in the HCP as a co-manager of the fisheries resource and the Tribe's fish resource allocation described (e.g. 50% of harvestable fish from a healthy watershed).

The involvement of the Tribe in forest management on state and private land has not been sufficient to meet the intention laid out in the Forest and Fish Report. The Forest and Fish Report, background section-G states, "**Tribal Role.** The participants continue to recognize that the Tribes must be involved in forest management decisions that affect the aquatic resources upon which their treaty fishing rights depend. Accordingly, this Report provides for *Tribal participation in all phases* of the regulation of forest practices including, without limitation, the development of forest practices rules by the Forest Practices Board; watershed analysis; restoration, compliance, effectiveness and validation monitoring; scientific research; and the implementation of rules and forestry prescriptions through such mechanisms as interdisciplinary teams." This "participation" does not occur to the satisfaction of the Makah Tribe. There is no legal requirement for Tribal Representation on the Forest Practices Board (RCW 76.09.030), even though there has been Tribal Representation at the discretion of the governor. There also is generally little meaningful and effective consultation currently practiced on the ground. There is no improvement or guarantee of Tribal participation in this HCP even though the intent is laid out in the Forest Practice Act (Chapter 77.85.180 RCW and Chapters 76.09 RCW).

The Makah Tribe is managing their fish resources using sustainable principles and has made real and significant sacrifices toward recovery by eliminating some fisheries and attempting to fill the void in habitat recovery efforts. For example, the Makah Tribe has eliminated cultural, substance, and commercial harvest on Lake Ozette Sockeye (ESA Threatened) for thirty years to aid in their recovery. This was done well before the 1999 listing. To date, this population has not recovered largely due to degraded habitat. Unfortunately, Tribal participation in the Forest Practice Program, which manages the freshwater habitat component of Makah fisheries, has been reduced to the role of 'affected' party. The Tribe must request in writing to be considered affected for any forest applications that are filed in their U&A, are often left out of formal or informal ID team meetings at DNR staff discretion, and their comments or input are only taken superficially by DNR when it comes to enforcement. The ability of DNR staff to arbitrarily exclude Tribal participation in management decisions must be eliminated prior to adoption of the HCP. The Services have a responsibility to the Tribes to make sure that Tribal rights and the agreements made with the Tribes are honored in the WACs and Board Manual through a thorough review. This is required because there are real problems with the way DNR staff are engaging Tribal staff.

ID-Teams

The traditional ID-Team process originally crafted in TFW has been slowly dismantled on the ground in the Makah U&A.

Formal ID-Teams, potentially triggered by Alternate Plans but also many other situations, are consistently avoided by DNR and the timber industry. They are viewed as dangerous openings that may allow experts to determine additional considerations that will force them to actually implement conservation measures. Individual Forest Practice Foresters (FPF) are able to use "any technical expert(s) the department deems necessary to review the issue". It has been our experience that Tribal staff generally bring the often overlooked and sometimes contentious technical or legal interpretation types of issues of importance to treaty resources to a FPFs attention. However, DNR FP staff contend that Tribal staff do not have to be consulted to help the department make its decision. Tribes are often listed as "others that may be involved" on the DNR policy documents on ID Teams. In some situations such as FP#2605578 (see Example section below), Tribal staff are actually specifically excluded from ID-Teams. Consultation with affected Indian Tribes as per WAC 222-10-30 #3 needs to be defined as more substantial than a cursory call to let us know what DNR will be doing.

Historically common *informal* ID-Teams, where groups of all stakeholders cooperatively reviewed all types of FPA's on the ground, have been eliminated. In practice, the timber industry would rather review FPA's in smaller groups, where they can have influence over a smaller number of people at a time. In this way, they are dividing the group in order to conquer it. DNR has accepted this paradigm shift. At many FPA's, multiple trips by the landowner will be given to each individual stakeholder (e.g., Ecology, Tribes, DNR, WDFW), but often all parties will not be on site together to review the situation.

To explain instances where they had neglected to inform Tribal staff of such on-the-ground FPA site visits, DNR has implemented use of the term "Informal Conferences" in place of the term ID Team. They claim using the term "Informal Conferences" allows the exclusion of Tribal staffs, their experts, as well as any non-landowner party while also excluding consideration of issues and information by the FPF outside the view of included parties. Informal conferences, at least in the Makah U&A, have evolved since the adoption of Forests & Fish. Far from increasing certainty that resources will be protected, this change in DNR management style reduces resource protection. The Tribes need certainty in any authorization of incidental take, that such "loopholes" will not be exploited by the State, and that the Tribal co-management role will be protected.

II.4 FUNDING CONCERNS

Funding for HCP implementation is not secured. Should the Services approve this HCP, target funding levels need to be committed to by the State of Washington and perhaps the Federal Government to ensure that Forest Practice Rules and the Adaptive Management Program function properly. Funding should reflect the immediate implementation and priority research and monitoring needs as well as a long term base monitoring program

for individual Tribes, in addition to the NWIFC, to participate to the fullest extent referred to in section G of the Forest and Fish Report. Any HCP will be completely ineffective unless these agencies are given full funding support well beyond that observed today. Currently, Tribal funding for participation is threatened with additional cuts.

Finally, NOAA and USFWS need specific funding to monitor HCP performance and track conditions on the ground to determine the effectiveness of the HCP in meeting the goal of minimal incidental take of current and future listed species. As its trustees, the Makah Tribe believes NOAA and USFWS must develop a report card that monitors the continued funding and compliance efforts under a deadline that must be met in order to keep any Federal Assurances active.

II.5 CONCERNS WITH THE STATE OF WASHINGTON

One of the Makah Indian Tribe's main concerns with this proposed HCP Alternative 2, associated EIS, and the potential for 50-year Federal Assurances, is that the State of Washington, especially DNR, has not had the wherewithal to implement existing Forest Practice Rules and is unlikely to increase its ability to implement this rule package or HCP on the ground. This HCP is a programmatic HCP and the EIS should have looked at how well this program (the Forest Practice/Adaptive Management Program) works since its inception in 1999/2001. However, the EIS did not take a critical look at the functionality and implementation of the Forest Practice Rules and Adaptive Management Program. Both programs have struggled in their performance from their inception.

These comments are intended to highlight the patterns of dysfunction and inability to implement law of the State of Washington, primarily the DNR. DNR has consistently proven to various stakeholders in natural resource management that they do not have the funds or personnel to implement this potential HCP, through their enforcement of the existing Forest Practice Rules, or modification of those rules through the Adaptive Management Program. This is especially apparent in the Makah U&A, which is one of the more remote areas of the state and receives very little attention from regulators or researchers to ensure that laws are enforced. Lack of enforcement and compliance have been endemic in the Makah U&A since well before the inception of Forests & Fish (see Section IV).

On-the-ground implementation problems go beyond DNR, to other agencies of the State of Washington such as the Department of Ecology (WDOE) and the Department of Fish and Wildlife (WDFW). These agencies also lack financial and scientific resources to implement and enforce existing Forest Practice Rules, let alone help the State abide by an agreement with the Federal Government on a HCP.

The Makah Tribe has extensive observational and empirical data that displays both the inadequacy of the existing Forest Practice Rules, and more importantly the severe lack of compliance monitoring or enforcement of these rules. The written rules often fail to make it to the implementation stage. Examples are provided in Section IV of this document, "On-the-Ground Examples".

II.5.a General Staffing and Funding

DOE has only two to three Forest Practice Enforcers for all of Western Washington. A typical Forest Practice Enforcer at DOE has to cover over 2 million+ acres and likely several thousand Forest Practice Applications (FPA's) per year. They are able to visit and review only a small proportion of all the activities in their area pre-approval stage, let alone review implementation and post-project success by collecting *quantitative* water quality data to ensure protection of State and Federal waters.

The DNR has more employees, but these employees are tasked with many additional workloads beyond just enormous areas of coverage. A typical DNR Forest Practice Forester (FPF) (e.g., Makah U&A) must cover over 300,000 acres of private timberland and State Trust Land. These foresters are tasked with reviewing all FPA's by pouring over applications, hiking RMZ boundaries and stream courses, analyzing road crossings and unstable slopes, and generally ensuring up-front compliance with all laws. In addition, they must coordinate site reviews with stakeholders, incorporate stakeholder (e.g., Tribal) concerns, process applications for approval or denial, review State Land FPA's, drive to and from remote areas typically two hours each way, and often fight forest fires for much of the summer. On top of all this, FPF's must somehow find time to conduct post-project-approval compliance monitoring of all activities in their area, including enforcing sediment inputs, especially from road networks. Furthermore, Hydraulic Project Approval (HPA) regulation and enforcement for type-4 and type-5 (type Np and Ns) streams will soon be transferred to DNR and their FPF's, further increasing their workload.

DNR has focused their efforts on the up-front Forest Practice Application review and compliance, leaving little time for implementation enforcement or compliance monitoring. Forest Practice Foresters currently see only a percentage (roughly 50%) of Forest Practice Applications before they are approved and see an even smaller percentage (roughly 10%) during or following harvest activities for enforcement or compliance. Often the only chance FPF's get to see or review implementation and the associated impacts is when driving by projects in progress or completed. Since most forest harvest units are not along mainlines and are located in remote parts of tree farms, infractions such as sedimentation may largely go unnoticed by most regulators or stakeholders.

To fully implement existing laws and tackle existing work loads of pre- and post harvest enforcement and compliance, 2 to 3 Forest Practice Foresters would be needed for every one that exists currently in the Olympic Region DNR: two FPF to fully review proposed projects, and one FPF or other scientist to conduct continuous compliance monitoring and enforcement of Forest Practice Rules and especially sediment production. This would be on top of existing RMAP personnel tracking documents and culvert replacement plans.

Once Hydraulic Project Approval (HPA) regulation for type-4 and type-5 (type Np and Ns) streams is transferred to DNR and their Forest Practice Foresters, FPF workloads will likely double again. Type-4 and type-5 streams are the most numerous on the landscape

and if laws and BMP's are not enforced at these streams, they have an enormous potential to deliver large quantities of sediment to downstream fish bearing streams. Thus, in the near future, it may require 4 Forest Practice Foresters for every 1 Forester that currently exists to fully and adequately ensure laws are being enforced and complied with.

The WDFW Habitat Division has slowly been dismantled by the State Legislature, and thus has been made less effective at enforcing the basic Hydraulic Code or other impacts to Fish and Wildlife on private land. The regulation of type-4 and type-5 (type Np and Ns) streams part of their Hydraulic Code duties are currently being transferred to DNR, whose level of staffing and funding will make these additional duties near impossible. For the enforcement activities on Type F streams, WDFW Enforcement Officers are spread extremely thin across the landscape.

Beyond the State of Washington, the U.S. Federal Government presence on this private forestry ownership (NOAA, USFWS and even the National Parks Service) is virtually non-existent. The EIS clearly shows how out of touch these Federal Agencies are with current conditions on the ground on private land.

II.5.b General Enforcement

The Olympic Region of DNR has been notorious for its lack of enforcement of FPA's for decades, both before and after the current rule package (see pre and post 1999 On-the-Ground Examples). In the draft HCP, Table 4.1 on page 158 outlines the enforcement activities for different regions of the state for 2002 and 2003. These numbers are not a measure of how many true violations there were because, with the limitations in staffing described above, compliance monitoring of all FPA's is impossible. Rather these statistics are a measure of how effective and diligent different DNR regions are at enforcing the law. They are not likely a measure of how well companies within each region obey the law, as many of the same companies occupy different regions (e.g., Crown Pacific in Olympic and Northwest).

As a quick summary, all the enforcement actions (both violation and non-violation and Notice to Comply and Stop Work Order) were summed for each year and compared to the total FPA load. During 2002 and 2003, Olympic Region had combined enforcement actions on less than <5% of the FPA's. It is difficult to believe that in the most difficult region in the state to conduct forestry properly (i.e., the wettest part of the state with the highest stream density and most erosive geology) that less than <5% of the FPA's had enforceable Forest Practice issues (Stop Work Order and Notice to Comply). Contrary to the Olympic Region statistics, the State average actions per year were double that of the Olympic Region, at greater than > 10%. The Northwest Region had triple the percentage of enforcement actions at >15%, with a relatively similar FPA load as Olympic Region, but less precipitation and more stable geology.

Olympic Region Statistics (Stop Work Order and Notice to Comply)

- Total Actions 2002 = 24 out of 678 FPA's or 3.53 %
- Total Actions 2003 = 34 out of 691 FPA's or 4.92%

State Average Statistics (Stop Work Order and Notice to Comply)

- Total Actions 2002 = 605 out of 5,567 FPA's or 10.87%
- Total Actions 2003 = 539 out of 5,379 FPA's or 10.02%

Northwest Region Statistics (Stop Work Order and Notice to Comply)

- Total Actions 2002 = 116 out of 698 FPA's or 16.61%
- Total Actions 2003 = 118 out of 766 FPA's or 15.40%

II.5.c General Compliance Monitoring

To date, DNR has made little progress on the commitments they have made for the compliance monitoring aspect of these newer Forest Practice Rules. Compliance monitoring that is done focuses on riparian buffer layout and tree counting in RMZ's. Compliance monitoring of forest road conditions and sediment delivery is non-existent. This fails to inspire confidence that things will change in the future as long as they have the loophole (budget constraints) to fall back on. If DNR fails to demonstrate that these HCP rules are working as intended while they are in the process of applying for a HCP, then it seems premature to approve the HCP. The formal compliance monitoring program should be finalized and outcomes fully assessed before DNR and private timber industry receive 50 year assurances for ESA incidental take.

The compliance monitoring program should include subgroups of compliance needs focusing on various types forest practices activities based on different vulnerabilities of the resource. For example, those activities that are conducted in wetlands or involve riparian crossings or road building should have a schedule of frequent compliance checks, while activities involving no road building, or minimal haul, or are exclusively on upland areas should receive more infrequent compliance checks.

Furthermore, DNR FPF's have enormous flexibility of what forest practice activities they review in the field or just approve or disapprove from the office without field checks. This process is not sufficient to ensure that DNR staff are consistent enough region to region and statewide for the next 50 years to protect aquatic and wildlife resources. A better schedule of review is needed that both randomly selects FPA's for pre and post-application review and prioritizes more sensitive locations or application class-types. There also should be a random selection process for the field review of Class-II applications, which receive minimal DNR review, so that incorrectly classified applications are reclassified more frequently.

II.5.d Water Quality and the CWA

The Clean Water Act is a federal law and no private land in the United States should be immune to it. However, the DOE and EPA have given private land governed by State Forest Practices laws, based partially from FFR, federal assurances that the CWA and TMDL's will not be implemented on these landscapes until 2009. In 2009, EPA and DOE will make a decision whether to implement TMDL's,. If water quality data show significant trends of improvement, TMDL's will not be conducted. The Forest Practices Rules in the HCP are designed to meet state water temperature standards established by

the Department of Ecology. However on page 241 of the HCP, uncertainty about their ability to do so is admitted when it is stated that achieving temperature results is 'likely' when following these rules. The Services should wait and see if that likelihood is born out in 2009 and then assess water quality impacts to T&E species (currently and future listed) based on actual data. ESA Federal Assurances should not be given to the DNR Forest Practice Program and private landowners until 2009, when water quality trends and Clean Water Act (CWA) compliance are scheduled to be fully evaluated by the Environmental Protection Agency (EPA

The problem remains however, that DOE and other stakeholders on the private commercial forest landscape are not actively collecting data to show improving or degrading trends, so that in 2009 few data will be available to make informed decisions. The timber industry has actively blocked data collection on their land. DOE is responsible for implementing and enforcing the CWA in the State of Washington. However, DOE has largely forfeited its data collection and water quality enforcement duties and agreed to let DNR take the lead in enforcing water quality on private forestland (Steve Bernath personal communication). DNR collects no quantitative data and has failed to implement the law or quantitatively monitor forest practices across the state.

The likely scenario in 2009 with few data available will be that TMDL implementation decisions will be addressed in the Adaptive Management Program, where water quality cleanup plans will be likely stalled for decades. Therefore, this HCP reaches beyond just the connection of State Forest Practice law and ESA protections. It also severs the links between the CWA and ESA, and gives federal assurances that these CWA and ESA laws will never be enforced on this private landscape.

II.5.e Sediment

Sediment issues are of particular concern to the Makah Tribe due to the dominance of sediment impacts on Tribal Fisheries. The Forest Practice HCP states that Alternative 2 will try to minimize sediment inputs but that "sediment inputs will remain above natural or background conditions" and that "chronic inputs of fine sediment from road and harvest surface erosion are expected to continue, as are episodic inputs of fine and coarse sediment associated with harvest and road-related mass wasting" (HCP Page 244 paragraph 3).

The Makah Tribe is dismayed by DNR's acceptance of continued sedimentation and that this sedimentation will protect Tribal fisheries against future degradation. A major goal of the HCP and FFR was to protect all threatened, endangered or future threatened or endangered species from pollution such as sediment. Below we will outline how poorly sediment pollution control measures are enforced by Washington State and how this current programmatic HCP will not sufficiently reduce sediment to recover ESA species into the future. Under this potential HCP, in no way should continuing and future sediment pollution from private land owners be deemed "incidental" to aquatic habitat impacts or only result in "incidental take" of ESA species.

By far, sediment is the largest non-point source pollutant on private forestlands and in the Makah U&A sediment is the one of the largest limiting factors in salmonid production. Cumulative impacts from sediment originate from forest roads, riparian zone related erosion (e.g., windthrow), and landsliding. While landslides are typically on the decrease, road sediment and riparian sediment production has changed little over the years and in some areas is increasing. This is a result of 1) continued poor road building and maintenance practices, 2) continued increases in road densities, 3) continued wet weather haul, 4) lack of or insufficient best management practices (BMP's), 5) legal requirements to replace culverts but without sufficient BMP's to minimize sediment wedge erosion, 6) inadequate riparian prescriptions in headwaters, 7) and most importantly, insufficient enforcement by the State. These poor practices are exacerbated by extremely erosive geology and high rainfall. These on-the-ground realities continue to discharge considerable amounts of sediment into essential spawning and rearing areas of all salmonids, including ESA species such as Lake Ozette Sockeye. Examples are provided in section IV of this document, "On-the-Ground Examples".

The State of Washington, specifically the Department of Natural Resources (DNR) and the Department of Ecology (DOE), is charged with monitoring and enforcing water quality standards on private forest land in the State. These two agencies are partners in implementing state law on private forest land, via Ecology's RCW 90.48.080 and WAC 173-201A and DNR's WAC 222. Private forested lands are <u>not</u> immune from these laws.

In addition, the Washington Department of Fish and Wildlife (WDFW) is responsible for permitting stream crossings via Hydraulic Project Approval (HPA), which typically contain conditioning and mitigation requirements that must be enforced by WDFW Enforcement Officers, in cooperation with DOE and DNR. This includes applying BMP's to mitigate sediment production during culvert replacement projects and minimizing the extent that sediment wedges above old culverts are eroded downstream (see below section IV "On-the-Ground Examples").

The DOE is legally mandated to monitor and enforce non-point source pollution within the State, including private forest lands. For class AA waters, which dominate the Makah U&A, WAC 173-201A states that "Turbidity shall not exceed 5 NTU [nephelometric turbidity units] over background turbidity when turbidity is 50 NTU or less OR "Turbidity shall not exceed a 10% increase in turbidity when the background turbidity is more than 50 NTU" "Background" is defined as the condition "outside the area of influence of the discharge under consideration" (e.g., upstream of the area of consideration). In addition DOE is a co-promulgator of WAC 222 with DNR, as described below.

DNR is mandated to enforce non-point source pollution preventions practices within the State on private forest lands via WAC 222 and the supporting Forest Practice Board Manual (as is DOE). WAC 222-24-052 (Road Maintenance) states that landowners must 1) "minimize direct delivery of surface water to typed water" *(1c-ii); and 2) "minimize sediment entry to typed water"*(1c-iii). WAC-222-24-040 *(3f) (Water Crossing

Structures) states that "culverts must be designed and installed so they will not cause scouring of the stream bed or erosion of the banks in the vicinity of the project". WAC-222-24-030 (Road Construction) states that 1) "erodible soil disturbed during road construction and located where is could reasonably be expected to enter the stream network must be seeded with non-invasive plant species" *(4), and 2) "construction shall be accomplished when moisture and soil conditions are not likely to result in excessive erosion or soil movement, so as to avoid damage to public resources" *(7).

WAC 222-24-10 *(2) states that "to protect water quality....by constructing and maintaining roads so as not to result in the delivery of sediment and surface water to any types water in amounts, at times or by means, that preclude achieving *desired fish habitat and water quality* by: (3) limiting delivery of sediment and surface runoff to all typed waters. "Desired fish habitat and water quality" is defined by the State of Washington (DOE and WDFW) in WAC 173-201A-200-(1e), which again states that for Class AA streams "turbidity shall not exceed a 10% increase in turbidity when the background turbidity is more than 50 NTU". In summary, State Law is clear and intricately woven and strongly connects DNR and DOE enforcement obligations to ensure meeting the requirements of RCW 90.48.080; WAC 173-201A; WAC 222 concurrently.

As co-regulators of RCW 90.48.080, WAC 173-201A, and WAC 222, DOE and DNR are required to enforce these laws and encourage detailed Best Management Practices (BMP's) to help eliminate sediment deliver to typed waters of the State, especially from road prisms.

For years to decades both before and after the 2001 State Forest Practice Rule changes, it has been in the case within the Makah U&A that these laws are generally not enforced effectively and that BMP's are not strongly encouraged. Sediment delivery enforcement or actual reductions typically only occur when initiated by the landowner, or when impacts are extremely blatant or accessible to the regulators (DOE, DNR, and WDFW). Please review case examples included in section IV "On-the-Ground Examples".

Three main issues are the root cause of this lack of enforcement of sediment pollution or implementation of BMP's. These also apply to many other issues beyond sedimentation.

1) Low Staffing Levels
2) Enforcement Methods
3) Human Values in Enforcement

e.1) Low Staffing Levels:

Staffing levels at DOE and DNR for Forest Practice compliance and enforcement are at the root of much of the sedimentation problems. Ecology has only two to three Forest Practice Enforcers for all of Western Washington. A typical Forest Practice Enforcer at DOE has to cover over 2 million+ acres and likely several thousand Forest Practice Applications (FPA's) per year. A typical DNR Forest Practice Forester (FPF) (e.g., Makah U&A) must cover over 300,000 acres of industrial timberland and State Trust Land. Please see "General Staffing" comments above.

DNR does have a few staff regionally to review and track road maintenance and abandonment plans (RMAPS), but their time is mostly spent on reviewing and tracking these documents and following removal of fish barriers. To date, little time has been spent in the field conducting non-culvert barrier compliance monitoring and enforcement of road sediment production, let alone following or enforcing true road maintenance activities (i.e., type of surfacing, rate of haul, and number of cross drains) that theoretically could reduce road sedimentation.

DNR has started an independent compliance monitoring program for regional FPA's, but this program has focused on riparian buffer layout and tree counting in RMZ's. Monitoring of forest road condition and sediment delivery is not part of the existent compliance monitoring efforts. The Adaptive Management Program and CMER are planning road effectiveness monitoring at a few randomly selected landscape blocks across the state. This type of monitoring may validate the effectiveness of rule package if properly followed, but in no way can it replace presently non-existent compliance monitoring of road sediment delivery.

DOE Forest Practice enforcers are fewer than DNR enforcers, which makes implementing existing State law (RCW 90.48.080 and WAC 173-201A) ineffective. DOE has voluntarily agreed to let DNR take the lead in enforcing State sediment pollution laws on private forestland, despite DNR's poor record on law implementation and their dearth of water quality professionals. DOE is responsible for implementing and enforcing the federal U.S. Clean Water Act in the State of Washington, which applies to all waters of the United States, with oversight of DOE by the federal Environmental Protection Agency (EPA). Thus effectively DOE has forfeited its Clean Water Act implementation duties, and its responsibility to provide clean water to the citizens and resources of the United States, including Treaty Tribes and their Federally Reserved rights.

Staffing levels of Area Habitat Biologists and Enforcement Officers at WDFW are also at critical levels due to the continued cutbacks at WDFW by State Legislators. HPA conditioning and mitigation requirements, especially those BMP's related to sediment production, are rarely fully implemented or enforced by WDFW Habitat Biologists or Enforcement Officers, as described below in #3, Human Values in Enforcement. In fact, it is rare that any WDFW Enforcement Officers are seen in the Makah U&A on freshwater streams.

e2) Enforcement Methods

DOE's enforcement techniques for sediment pollution involve *quantitative* measurement techniques to verify compliance with RCW 90.48.080 and WAC 173-201A, through measurement of background vs. impact locations often above or below project areas. However, DOE's presence on the private forestry landscape is minimal and they have partially forfeited their water quality duties to DNR. Contrary to DOE, DNR has independently decided to not take a *quantitative* approach to sediment pollution enforcement, largely due to lack of staff time and technical assistance. Instead, DNR has taken a *qualitative* approach to sediment pollution enforcement, which has opened the

door to much flexibility and variability of when, where, and how sediment pollution laws will be enforced.

DNR's *qualitative* approach to sediment pollution enforcement involves visually comparing different water bodies and their relative amount of "color" or "dirtiness". They claim that they can assess turbidity visually, rather than needing to measure it directly. While qualitative turbidity observations are useful, they are overly subjective. Depending on the situation, they may enforce pollution when a "dirtier" ditch or stream draining a road or forest practice area is entering "cleaner" typed water body. This approach has problems due to the reliance on variable human judgment and ability, and the associated inconstancies with the final decision whether or not to enforce the law.

Despite the inherent variability of human judgment, this visual qualitative method may work during non-storm, non-precipitation periods, when receiving water bodies are relatively clear and disturbance areas are producing sediment (e.g., during summer road building). However, this visual qualitative method becomes extremely problematic during the 9-month rainy season when both the sediment producing areas (e.g., ditches) and receiving water bodies are "colored" with sediment. Thus using this method, the FPF or other enforcer must rely on their ocular estimates to compare shades of brown. This is obviously not an approved scientific method and is an impossible task for any FPF.

The majority (>75%) of fine sediment is transported in streams and from road disturbance areas during a minority of the time (<25%), mostly during peak rain and flow events. The facts that 1) DNR has limited enforcement staff to be able to chase and assess these sediment-producing events and 2) visual turbidity estimates are relied on to compare shades of brown, combine to result in very few enforcement actions. Furthermore, no audits of the effectiveness of this weak enforcement protocol have been made by DNR. Validation of this enforcement protocol with actual quantitative sediment data during storm events, wet weather truck hauling, and other activities has never been done by DNR and is not planned by DNR or through CMER.

Furthermore, during road culvert removal or replacement activities, enforcement of sediment delivery downstream of culverts (10% above background/upstream of the culvert) is often overlooked and rarely assessed visually or quantitatively by DNR, DOE or WDFW. Theoretically culvert replacements are positive actions to improving fish habitat, but not unless the sediment wedge retained behind old culverts is partially removed to reduce cumulative sediment inputs. Common practice in the Makah U&A when removing or replacing culverts, is to allow sediment wedges to flush/erode downstream during large flow events. The other common outcome with culvert removals is that only part of the old road fill is removed, allowing addition fill sediment in addition to wedge sediment to erode downstream. This release of fine sediment downstream can have significant impacts on both water quality (turbidity) and spawning habitat. Please see section IV "On-the-Ground Examples".

Thus, at least in the Makah U&A, cumulative sediment inputs from road networks continues partially unchecked, much like it did before newer Forest Practice Rules, which mostly focused on riparian buffers and removing fish blockages.

e3) Human Values in Enforcement

Enforcement of sediment pollution by DNR is highly subjective and depends on the educational background, scientific judgment, opinion, and values of the Forest Practice Forester. Thus, associated rule interpretation and implementation is quite variable by DNR FPF at the state, region and sub-region scales. Depending on the FPF and the community they are tied to, each FPF brings a predetermined set of interpretations and values to the workplace. Some are loyal to the pure rule set without considerable interpretation, while others bring considerable personal interpretation to the rules. This becomes apparent when working with different FPF in the same region, or even different regions. Due to the qualitative approach DNR has taken at enforcing sediment pollution, these value judgments influence project outcomes and ultimate resource protection.

While DNR does attempt to create consistency within regions and FPF's through generalized trainings, ultimately they have not been fully successful in controlling how individual values affect decision-making.

Furthermore, some FPF's bring a detailed knowledge base to the workplace regarding the importance of cumulative sediment impacts at the sub-watershed scale, while others remain unconvinced with the fact that relatively small sediment impacts at the site scale can have larger cumulative impacts downstream due to the hierarchical additive nature of stream networks and disturbance sites.

Another example of human value influence on enforcement comes from WDFW's HPA conditioning, mitigation, and BMP requirements for culvert projects and the related sediment production. While Area Habitat Biologist are typically well educated in BMP's and write BMP's in permit conditioning, they are not the enforcement arm of WDFW. This task falls on WDFW Enforcement Officers whose many overloaded duties including enforcing the Hydraulic Code and its conditioning WAC 220-110. While for major cases biologists will request assistance from Enforcement Officers to take action, the overwhelming number of other violations, especially small cumulative culvert and sediment issues, receive little attention. Enforcement Officers are either too busy with other duties, or hesitate getting involved with hydraulic issues due to their lack of familiarity with the issues, lack of interest in the issues, or both.

Enforcement actions are also effected by associated group pressure on the FPF. When a group of DNR regulators is tasked with enforcement, they are often susceptible to "groupthink", which is the tendency of a group to strive for consensus and avoid critical examination of the situation or alternatives. The Hoko River 9000 road (see On-the-Ground Examples below) is an example of groupthink where critical thinking at the individual level lost out to groupthink.

Beyond personal values and groupthink, there is an enormous amount of political and peer pressure from the local timber industry and associated community members on State Employees in small rural communities. Timber companies resist any enforcement monitoring on their land and put an enormous amount of pressure on state regulators to do nothing. Often is the case that regulators are faced with the fear of community repercussions over the "loss of jobs". Typically these concerns win out, and fish health and habitat needs take a back seat. Meanwhile, local and regional fisheries that the Makah Tribe depends on culturally and economically struggle with recovery.

II.5.f CMZ's

DNR often ignores the requirement to identify and delineate potential channel migration zones (CMZ's) properly on all fish bearing waters. In practice, DNR (or timber company surveyors) do not recognize channel migration zones unless they are dozens of acres in size (e.g., Hoh River mainstem) and overly apparent on large mainstem rivers. Forest Practice Rules do not and should not put a limit on CMZ size or recognizability. In general, DNR FPF's and industry foresters lack educational background in fluvial geomorphology necessary to recognizing or delineating CMZ's. In addition, due to the dearth of DNR field personnel, rarely is DNR actively searching for CMZ's. There are only a few DNR employees (professional geologists) who have the expertise to identify or delineate a CMZ, but in many cases, since foresters (both private and DNR) rarely identify CMZ presence, experts are not called into the field to assist in delineation. In many cases, no or incorrect protections are left for CMZ's on small and medium sized rivers and streams. Dozens of cases exist in the Makah U&A for lack of CMZ delineation on smaller rivers and streams (Hoko, Sekiu, Ozette, Sooes River Watersheds). Please review the examples included below in the section "On-the-Ground Examples".

II.5.g Alternative Plans

The Makah Tribe supports the use of Alternate Plans to craft better solutions for harvest options that are mutually beneficial to the fish and wildlife habitat and efficient timber extraction. However in certain cases, Alternate Plans have been utilized to by both DNR and the timber industry to attempt to set precedence for future alternate plans. Furthermore, DNR has attempted to craft "Alternate Plan Templates" to more easily implement certain types of alternate plans across the landscape. For example, current alternative plans have been proposed and implemented that cut all non-conifer trees (i.e., alder) in the inner and outer zones of small streams and propose to mitigate by just replanting conifer. In these situations, alder usually encompasses over 80% of the riparian zone, effectively making a clearcut out of the inner and outer zones. By removing this alder and clearcutting the inner and outer zones, small streams will be robbed of any wood input and shade for 50+ years. Alder large woody debris is very important and functional in small fish bearing streams and without near-term recruitment, the wood deficit in streams will be higher than currently observed from forest practice legacy. The Makah Tribe views these actions as attempts to circumnavigate the existing rules to provide less resource protection. Alternate Plans must be evaluated on a site-by-site and individual basis in order to fully protect local resources and provide equal protection to

resources. Please review the examples included below in the section "On-the-Ground Examples".

II.5.h Fish Habitat

"Fish Habitat" is yet to be defined, it seems premature to offer assurances statewide when no agreement on what constitutes fish habitat, including off-channel habitat, has been made or there has not been a process defined that assures resolution of the issue based on continued application of the best science.

The intent of the rules was to protect all fish habitat with appropriate buffers. However, fish habitat has not been fully defined and a validated fish habitat-mapping model has not been fully ground truthed. Likely in the Makah U&A, no fish habitat mapping model will be sufficient to identify fish habitat, especially off-channel habitat. Only through a proper definition of fish habitat and abundant ground surveys of habitat potential by well-training biologist, will these complex habitats be fully protected.

Fish electroshocking surveys are still being conducted that place the type 3/4 stream break at the nose of the last fish. However, due to the continued depressed status of stocks of most fish species in the Makah U&A, this approach is flawed, as fish populations are not robust enough to fill all available habitat niches. Thus, habitat that may be critical to the full recovery of fish stocks is not being fully protected.

Off-channel fish habitat is often unprotected in the Makah U&A by DNR. The Olympic Peninsula has unique off-channel habitat, usually floodplains and forested wetlands that fish species, especially coho, use as refugia habitat during winter flood events. During these events, fish escape mainstem habitats choked with fine sediment to find refuge in floodplain habitats. This has been well observed by most fish biologists on the peninsula during storm events. The WDFW and DNR sanctioned fish distribution protocols (Board Manual 15) have an open time window in the spring (March 1 to July 15) within which a survey needs to fall. The problem remains that most surveys are not conducted during high flow or flood events during this time period, and surveyors rarely explore off-channel habitat with electoshockers or visual observations. Furthermore, WDFW (and DNR) do not have the personnel or time to check and ensure water typing and fish habitat delineations, especially off-channel, are correct. While Tribes are fish co-managers with WDFW, Tribes do not have regulatory authority to enforce corrections of fish habitat delineations. Therefore, fish habitat is often cut over, but rarely are the number of impacted sites documented. This has been the case for many years before the Forests and Fish rules, and it continues to this day. Please review the examples included below in the section "On-the-Ground Examples".

II.5.i Culverts

Over the last few decades, the WDFW Habitat and Enforcement Divisions have slowly been dismantled by the State Legislators. In addition, the long standing State Hydraulic Code has been slowly chipped away at in attempts to reduce its effectiveness on the

landscape. As late and part of the 2001 Forest Practice Rules and legislative rulings, Hydraulic Code implementation has partially fell out of WDFW control and into the responsibility of the Forest Practice Rules and the RMAP process. Unfortunately, WDFW has the expertise to implement the hydraulic code, not DNR.

Recent State plans surrounding the Hydraulic Code include exempting type-4 and –5 stream road crossings and culvert placements from the Hydraulic Code, while also transferring regulation of these crossings and culverts to DNR (HCP Page 136 paragraph 2). The Makah Tribe does not support this transfer of program duties because DNR has neither the staff time nor technical expertise to implement these Hydraulic Code responsibilities.

Numerous examples exist of insufficient DNR regulatory assistance or oversight in dealing with culvert impacts on aquatic resources, such as helping enforce and implement BMP's in and around culverts to reduce sedimentation (see section IV. On-the-Ground Examples). These stream types are the most numerous across the landscape in terms of overall stream length (usually >50%), and have a large potential to impact downstream fish bearing waters if managed improperly. Does USFWS and NOAA really believe that conditions will improve for ESA species with this transfer of duties? Can you accept this regulatory oversight as part of a programmatic HCP? Can you accept this transfer of duty from an agency with a century of hydraulic expertise, to an agency with zero expertise in hydraulics?

II.6 CONCERNS WITH ADAPTIVE MANAGEMENT

The Adaptive Management Program (AMP) is not yet a proven process and no Federal Assurances should be given without observing its success through a full adaptive management cycle. The goal of the AMP could be undermined by the 'no surprises' clause. No surprises language states that "Additional measures will not involve the commitment of additional land, water or financial compensation or *additional restrictions on the use of the land*, water or other natural resources under the original terms of the HCP without consent of the of the permittee". So even if science developed through the AMP dictates that the original agreement is not doing the job its supposed to, the Services will have no authority to step in on behalf of the resource to apply the more stringent rules. Thus, the USFWS and NOAA will have ceded their rights to enforce the Endangered Species Act (ESA) by the agreement to the "no surprises language". Subsequently, the resources will have to rely on either the goodwill of an elected political board to adopt the rules ("only by final order of a court with jurisdiction"), or "on the legislature directing the board to adopt or modify the rules".

From a Tribal perspective this is not a satisfactory arrangement. If our trustees agree to this framework, you are in effect putting future protection prescribed under the FFR and ESA aside with no assurance that the landowner and Forest Practice Board will not ignore future information under the current structure of the AMP thereby giving Tribes no recourse within the current FFR. No federal assurances or Endangered Species Act

coverage should be given until a full evaluation is conducted of the functionality and effectiveness of DNR's Forest Practice Program and Adaptive Management Program.

II.6.i CMER

Before the HCP is approved, there are some results pending from the CMER group that should be assessed through to the end of the adaptive management process to ensure that the system works and does not stall. Patience before approving this HCP should ensure that important forest management rules will be effectively changed if need be through the Forest and Fish Adaptive Management Program. For example the CMER study of effectiveness of buffer widths should move through the adaptive management process before approving the HCP. In addition, the Perennial Initiation Point (PIP) study and Desired Future Condition (DFC) study have been stalled at policy levels for some time and their science has not been incorporated into numerical rule change. These studies are the first real test of the Adaptive Management Program cycle and the outcomes of this process should be evaluated before Federal Assurances are made.

In addition, results from road impact studies should be incorporated before approval of the HCP. When monitoring occurs through the CMER Roads Sub-basin Scale Effectiveness Monitoring Program stakeholders will know the general effectiveness of the FPHCP on sediment impacts (page 22 CMER Workplan). However, the CMER goal for this program is long-term and results could take a long time in coming. We reiterate that a precedent setting rule changing adaptive management result should be observed before approval of the HCP.

II.6.ii Concerns with monitoring

Lack of extensive state-wide effectiveness monitoring on DNR's own HCP for State Lands does not provide confidence that DNR will appropriately conduct this type of monitoring for this Forest Practice HCP. For example, on DNR State Lands on the Olympic Peninsula, little water quality or sediment monitoring is done or planned to determine the effectives of the various components of the State Land HCP. Monitoring is only conducted in a few unrepresentative watersheds state wide, with none along the coastal zone or Olympic Peninsula.

There are four elements to Makah monitoring concerns regarding the Forest Practice HCP and Adaptive Management Program, all of which have been discussed previously. Firstly, the monitoring plans out of CMER should not be the only method for Tribes to collect data that assesses the habitat health that the Tribe's fish depend upon. Secondly, the monitoring plans for CMER effectiveness monitoring and DNR compliance monitoring should be made public prior to issuance of an incidental take permit through this HCP. Thirdly, the adaptive management process for Adaptive Management Monitoring Studies should have a 'trial' run that ensures that all processes are effective. Fourth, DNR and DOE's ability to conduct effectual monitoring should be confirmed, particularly regarding the state's water quality obligations once the CWA federal assurance is reviewed and the implementation of RMAP's has occurred.

There are specific concerns the Makah Tribe has with how CMER monitoring plans fit into ongoing Tribal Monitoring Plans that have monitored long-term ambient conditions for years. The timber industry is slowly trying to reduce long term ambient monitoring conducted by Tribes since TFW started over 20 years ago. Recent ambient monitoring proposals (temperature and turbidity and habitat surveys), many of which have been ongoing for over a decade on streams draining their property, have been declined recently by timber companies, claiming that CMER will be doing all this monitoring for the individual Tribes. In reality, CMER work plans only involve site-specific cause and effect studies that are spatially and temporally finite. These studies cannot provide the level of long-term ambient data within specific watersheds needed by the Tribes for long-term fisheries management in those watersheds, or present an overall aquatic health picture of local watersheds. Also monitoring plans designed to assess the effectiveness of road sediment rules are based on random sampling of square blocks at the State-scale, which will not help inform the Makah Tribe about local conditions in their U&A watersheds.

These ambient monitoring data are needed by the Tribes for long-term fisheries management in those watersheds, so that the Tribes can fulfill their fisheries co-management responsibilities at the state, federal and international levels. In order to help appease Tribal concerns over the inadequacy of the Forest and Fish Report, the Federal Government provided funding to Tribes to continue monitoring watershed conditions on the ground, which focused on ambient monitoring. Tribes never agreed to fully and solely rely on CMER for monitoring, nor relinquish their long term monitoring needs.

The HCP should outline that Tribes have a co-management right to monitor watershed health, when the interest is not in pursing an adaptive management agenda or potential rule change.

II.7 CONCLUSION TO HCP SECTION

If information becomes available through the HCP Adaptive Management Program and from other reputable research organizations showing that many forest management activities outlined in this HCP are contributing to the failure to meet the four goals of the Forest and Fish Report (as the Tribe predicts will occur), the Tribe is doubtful that the DNR will implement drastic changes and modifications to the Forest Practice Rules that will be required in order to protect salmonid and riparian obligate species, and be able to monitor and enforce the changes.

The Tribe believes that there is a great body of evidence and research supporting the need for increased restrictions on detrimental forest practices today. The Tribe is disappointed that NOAA as the Tribes trustee does not weight this body of evidence heavier and require the State to implement the minimal effects strategy and follow the precautionary principle in their application for an incidental take permit for the next 50 years. We expect the federal services to demand the aquatic habitat protections necessary to provide for the survival of the fishery resource that the Makah Tribe has culturally evolved with over centuries.

III EIS Elements of Concern

Since this potential Forest Practice HCP is a programmatic HCP, the goal of the EIS should have been to analyze how well this program (the DNR Forest Practice/Adaptive Management Program) has worked since its inception in 1999/2001. However, the EIS failed to take a critical look at the functionality and implementation of the Forest Practice Rules and Adaptive Management Program. Both programs have struggled severely in their performance from their inception, as partially outlined above in Section II on the HCP Elements of Concern.

Regardless of alternative, the assumption that stakeholder participation and support will remain 'robust' for non-regulatory components of the program for the next 50 years is not guaranteed or likely (TABLE S-1).

III.1 ECONOMIC ANALYSIS OMMISSIONS

The term "Economic Viability" needs to be defined. This term cannot stand alone (as solely applied to timber production) without being balanced by the economic, religious and cultural aspects of Treaty Tribes and other citizens of the State of Washington affected by these decisions. The current focus and who controls the term will continue to allow the timber industry to limit the effectiveness of the Adaptive Management Program (AMP). Without a thorough and balanced definition, any science moving through the AMP process that suggests a more conservative rule package will be stalled by the "specter" of reducing economic viability of the industry.

The Makah Tribe is interested in the economic viability of the both fisheries resources and timber resources. A sustained balance between these two economies can be reached, but not under the alternatives presented. However, the HCP preferred Alternative 2 does not strike the proper balance between these economies, and focuses preferentially on the timber industry. Despite the difficulty in analysis, the EIS should have fully analyzed each alternative's impact on all economies affected by Forest Practices, and displayed the economic balancing act in full. For example, the EIS should have displayed the projected increase in economic contribution from a healthier fishery for Alternatives 2, 3, and 4, under the sections "Recreation and Commercial Fishing Employment" and "Economic and Social Criteria". These results could have then been compared to similar calculations in "Lumber and Wood Products Employment", so that reviewers could understand the costs and benefits from the overall economic standpoint, not just from the lumber standpoint.

Specifically under the economic analysis of the timber industry (e.g., "Lumber and Wood Products Employment"), the EIS failed to take into account the other factors besides regulatory certainty that affect the local timber economy. These factors include: the global price of raw timber, pulp, and saw logs; mechanization impacts on employment; labor or technology costs; corporate agglomeration; fuel prices; public preferences; etc.

Finally, the presumed threat and argument that without an HCP, forestland in Washington State will be partially converted to urban development or other use is a flawed argument. Under any of the Alternatives, there are no laws beyond local county ordinances that will prohibit timber conversions for fifty years. Alternative 2 will guarantee no land conversion protection. Management and regulation of private forestland needs to be the focus of the EIS analysis. Managing and controlling urban development is and should be addressed within the proper local forums such as with county Growth Management Acts.

Obviously the EIS and HCP have an urban Puget Sound (Olympia/Seattle) bias. At this time, development and urbanization is not the continued major threat to forestland or aquatic resources in the Makah U&A, or any other rural area of Washington where private timberland still predominates and where the majority of this potential HCP covers.

III.2 RMAP

The draft EIS overstates the assumptions that the RMAP's program will work correctly to reduce sediment delivery to streams (pages 4-37 to 4-40). To date, the RMAP process has focused on fish barrier removal and culvert replacement prioritization. Most observed RMAP's to date have not included "prioritization of problem sediment areas and [the creation of] an implementation schedule that would reduce the delivery of chronic sediment to stream". Conditions on the landscape and detailed planning to improve these conditions have not changed significantly since the 2001 Forest Practice Rules. The rules still "emphasize the use of culverts and ditches as the primary means of addressing hydrologic issues, but do not adequately address sediment production". Conditions into the future (Alternative 2) are likely to remain similar to conditions during the 1999 DNR unpublished road survey (Alternative 1, scenario 2), that found "approximately 65 percent of the surveyed roads had direct delivery of sediment to streams (Washington DNR unpublished draft report, 1999)". Our observations in the Makah U&A mimic these surveys to this day.

Furthermore, 2001 Forest Practices Rules are still subjective as it relates to sediment production, problem identification, enforcement and compliance, and resource damage. No scientifically defensible targets have been made by CMER science that represent real conditions in streams based on real empirical data, and thus no "established acceptable limits on how much sediment delivery constitutes resource damage" in real watersheds have been set. However, an enormous amount of creditable scientific research has been conducted (but ignored) for over thirty years that identifies thresholds of sediment levels that constitutes resource damage (i.e., kills fish), as summarized in Bash et al. 2001 and McHenry et al. 1994. Finally, the rules and RMAP process still do not directly address the desired outcome, which is to avoid resource damage from sediment. In most situations, resource damage will be avoided when targets of sediment delivery are set at zero above background levels, and diligent progress is made on the path toward meeting this end goal.

Bash, J., Berman, C., and Bolton, S. 2001. Effects of Turbidity and Suspended Solids on

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McHenry, M.L., Morrill, D.C., and Currence, E. 1994. Spawning Gravel Quality, Watershed Characteristics and Early Life History Survival of Coho Salmon and Steelhead in Five North Olympic Peninsula Watersheds. Lower Elwha S'Klallam Tribe, Makah Tribe, Port Angeles, WA.

III.3 OZETTE SOCKEYE

The EIS's coverage for Lake Ozette Sockeye (Oncorhynchus nerka), a threatened ESA listed species, is completely insufficient and factually incorrect. Out of all watersheds in the State of Washington with an ESA listed species, Lake Ozette likely contains the largest watershed percentage (>75%) of private timberland governed by State Forest Practice Law and potentially this HCP, and thus should have been analyzed in detail for its potential effects on Ozette Sockeye.

The only significant coverage of sockeye habitat impacts is on Page 4-214, lines 3-9. Here, the EIS states that the "NMFS status review (Waples et al. 1991) cited several major non-forestry related factors (e.g., non-native introductions, ocean conditions, and harvest affecting their status) affecting the species. Nevertheless, Nehlsen et al. (1991) also indicate forest practices in the 1940's and 1950's may have contributed to their decline"

In no way do these references or presumed facts fully represent the current watershed condition, stock status, or limiting factors for Lake Ozette Sockeye salmon. These references are outdated (14 years old) and in know way represent the state of knowledge of limiting factors for Ozette Sockeye. Broadly speaking for all Olympic Coast Sockeye, they are still not correct or comprehensive. NOAA and the USFWS have ignored the large amount of research that has occurred both pre- and post-1991 literature for Lake Ozette Sockeye, including impacts from forest activities on habitat. It does not even contain information used during the 1999 ESA listing process by NMFS/NOAA. A current draft Limiting Factors Analysis of this Sockeye population is available at: http://noplegroup.org/NOPLE/pages/watersheds/OzetteLakeWatershedPage.htm

The Makah Tribe has taken the lead management and research role in the recovery of Ozette Sockeye for over thirty years, long before the population was listed as threatened under the Endangered Species Act (ESA) in 1999. For the last twenty-five years (25yrs), the Makah Tribe has eliminated Tribal harvest pressure from this population of sockeye in order to accelerate its recovery. There is no other significant non-Tribal fishing pressure on this population.

Despite the elimination of commercial fisheries on Ozette Sockeye, this population has failed to recover. Broodstock-derived hatchery re-introduction efforts have succeeded only in one out of three tributaries, likely due to poor habitat conditions. The core Lake

Ozette beach spawning population levels have not recovered or changed significantly over the years.

Freshwater habitat integrity and altered freshwater ecosystem process emerge as the main limiting factors to the full population recovery of Ozette Sockeye. Commercial forestry is at the heart of the altered freshwater habitat integrity, both from legacy impacts, but also from continuously poor practices, regulations, and insufficient enforcement. Within the Ozette Watershed, over seventy five percent (>75%) of the land is private forestlands governed by the State Forest Practice Rules, and potentially this HCP.

NOAA Fisheries just received comments on their plans to designate "Critical Habitat" for Lake Ozette Sockeye. The Makah Tribe objected to the proposal to exclude lands governed by State Forest Practice Rules and HCP's from Critical Habitat designation. In no way do these existing Forest Practice Rules or potential HCP fully protect these Critical Habitat areas to ensure the long-term recovery of Ozette Sockeye. Therefore, it remains essential for NOAA and the USFWS to fully implement its legal requirements to fully protect ESA listed species, fulfill its trust responsibilities to Indian Tribes, and properly protect freshwater habitat that will accelerate Ozette Sockeye to full recovery.

Beyond Lake Ozette Sockeye, several unlisted species (Chinook and Chum) in the Ozette Watershed have a high likelihood of extinction (literally) and have been significantly impacted by past and current Forest Practices (Nehlsen et al. 1991). It is unknown whether the Chinook population if fully functionally extinct. The EIS failed to account for these stocks of salmonids, their status, or the impact that these Forest Practice Rules and potential HCP will have on their existence into the future.

IV. On-the-Ground Examples

Alternate Plans:

- **fp2605578: Lake Ozette Watershed, Crooked Creek.** This FPA was initially proposed as an Alternate Plan and proposed to log standing and down old growth cedar and spruce snags from the inner and outer zones of a RMZ along a type 3 fish bearing stream and occupied marbled murlet habitat. In order to avoid an ID-Team, the timber company gathered a pre-application stakeholder meeting ("ID-Team like") to discuss the alternatives. During the pre-application stakeholder meeting, the DNR Forest Practice Forester advocated to harvest this timber through an Alternate Plan, despite the uncertainty in the rules whether it was legal to harvest old-growth snags and down wood in the RMZ at DFC. It is clear that this was not the intent of the 2001 rule package, and that this situation was unusual. Clearly the DNR representative saw this proposal as positive way for the DNR and timber company to set precedence, via an alternate plan, to allow additional harvest in sensitive areas.

  Other stakeholders viewed this proposed plan skeptically, as it provided little resource protection. These standing snags and down wood provided the ultimate in desired future conditions (DFC) for riparian zone health, for both wildlife

(Murrelet) and fish habitat (coho, cutthroat, and potentially sockeye). DNR and the timber company were basically advocating taking a stand of timber at or beyond DFC down to a condition of inferior habitat, which was not the intent of the rules. The results of the pre-application meeting were that the company submitted a FPA application as a Class-IV special and decided not to pursue the project as an Alternative Plan.

Under the Class-IV special application, a second "non-ID-team" meeting was arranged to discuss specifically marbled murrelet issues, regarding potential damage and disturbance from the proposed logging to the surrounding green tree habitat. Somehow, this old-growth stand with snags was excluded from potential spotted owl habitat years past. This "non-ID-team" excluded any Makah Indian Tribe representatives, despite the existence of a well-qualified Wildlife Biologist with the Makah Tribe. DNR felt that since it was not an official ID-Team and it focused on wildlife rather than fisheries, that Makah input was non-essential.

After this "non-ID-team", the proposal was approved by DNR. However, a stop work order was issued shortly after as the issues were taken to higher policy level at USFWS, WDFW, DNR and the timber company, due to significant concerns that even the Class-IV special would harm resources. Ultimately, the proposal was approved to log standing snags but not down wood, via political negotiations that excluded Makah Tribal input or participation.

Channel Migration Zones

- **fp2605402: Hoko River Mainstem**

No CMZ was identified for this harvest unit, despite several active indicators of channel migration, and numerous small, non-contiguous, but functionally important channel migration zones.

- **fp2605522: Hoko River / Herman Creek Confluence Area**

A general CMZ was noted to exist on the map, but no CMZ was delineated on the ground. Harvest and road construction occurred fully within the RMZ, due to the lack of delineation of a correct CMZ. Furthermore, road right-of-way timber harvest exceeded that allowed, further into the RMZ, and no penalty's were given to the operator or land owner by DNR for violation of forest practice law.

- **fp2605939: Hoko River / Ellis Creek Confluence Area**

A CMZ was identified on ground, but its boundary was laid out incorrectly and not fixed until Makah Tribe personnel persistently requested DNR to fix delineation. Only through Tribal negotiations with the landowner was the CMZ delineation improved, without DNR input. Ultimately the CMZ was still only marginally protected. Two temporary stream road crossings also cut through this sensitive CMZ, causing significant input of fine sediment due to violation of HPA permit conditions and sediment BMP's.

- **fp2605788: Big River Distributary Channel**

This distributary channel (deltaic overflow channel) was not recognized as a channel migration zone despite the fact that Big River actively enlarges and partially abandons this channel over time. Partial avulsion potential does exist at

this location but it is unlikely that the entire river would avult into it. The lowest elevation zone of this distributary channel should have been delineated as CMZ. Furthermore, DNR was bold enough to approve the applicant's claim that this distributary channel was type-5 water (ephemeral non-fish bearing). DOE later stepped in with the Makah Tribe's assistance and declared that it was not a type-5 water, but rather a type-1 water well connected between Lake Ozette and Big River below the ordinary high water mark (OHWM). Ultimately, the site was partially protected as type-1 fish habitat, but not as a CMZ.

Fish Habitat

- **Pysht River Valley (and other Mainstems)**
  Numerous recent examples in the Pysht River exist where off-channel fish habitat has been either logged over or only partially protected. However, many other watersheds and mainstem river valleys in the Makah U&A have been similarly affected. These off-channel areas are by far the most important fish-rearing habitat for coho salmon in Olympic Peninsula Watersheds.
- **fp2605578: Lake Ozette Watershed, Crooked Creek**
  This tributary had significant off-channel fish habitat that was excluded during RMZ delineation by both the landowner and DNR. This application was proposed in August, which made delineation of off-channel habitat difficult. Numerous reviews were made by WDFW and DNR, who only located and protected a portion of the off-channel habitat. Tribes were originally excluded from delineating this habitat due to manipulation of the ID-Team process, and thus requested a stop work order. Independent negotiations with the landowner were only marginally successful at protecting the remaining habitat and DNR did not issue a stop work order for incorrect fish habitat delineation.
- **fp2605788: Big River Distributary Channel**
  This distributary channel (deltaic overflow channel) was claimed to be a type-5 (ephemeral non-fish bearing) stream by a timber company and approved by DNR. WDFW claimed that fish could access the channel during regular flood events and that some fish could be trapped in certain forested wetland pockets. WDFW agreed to not protect the channel as fish habitat under the assumption that some fish could die there even if death had never been documented. DOE later stepped in with the Makah Tribe's assistance and declared that it was not a type-5 water, but rather a type-1 water well connected between Lake Ozette and Big River below the ordinary high water mark (OHWM). DOE and Tribal experts concluded that in fact the channel was good fish habitat and that it served as an important conduit of juvenile fish between Big River and Lake Ozette. WDNR reluctantly gave a notice to comply to update the water type.
- **fp2606214: Big River Tributaries and Off-Channel Habitat**
  Water type maps for this forest harvest unit were provided to DNR from marginal (but legal?) fish surveys by timber industry consultants. DNR approved the application before WDFW and Tribal biologist could review the site and water type update. Upon later review during active harvest, it was determined by the fish co-managers that substantial in- and off-channel habitat existed both at the lower floodplain area of this unit, and the upper forested wetland areas classified

as type-5 water. The upper forested wetland had already been partially logged, before any review or corrections could be made. The forest harvest activities were shut down by DNR, but no fine was given for cutting over fish habitat.

- **fp2605522: Hoko River / Herman Creek Confluence Area**
  Not only were CMZ and RMZ boundaries not properly recognized at this site, but also fish-rearing habitat on the low connected floodplain was also unrecognized. Either way, with fish habitat or CMZ protection, the RMZ boundary should have started at the valley wall edge and was not, and thus was partially logged over.

Sediment Issues

There are countless recent examples of sediment inputs from roads and harvest units in the Makah U&A. Most are small to medium load sources that cumulatively create large impacts at the watershed scale. A few recent examples on Sedimentation after 2001 include:

- **fp2605939: Hoko River / Ellis Creek Confluence Area**
  This FPA contained two temporary stream crossings across the Channel Migration Zone (CMZ) of lower Ellis Creek (one bridge and one culvert). The HPA permit from WDFW required numerous BMP's including using imported clean washed fill, sediment traps, silt fences, mulch and hay bales, grass and vegetation planting, time limitations etc, along with other mitigation measures. Furthermore, DNR and DOE laws required minimizing delivery of fine sediment to streams [turbidity not to exceed 10% above background (upstream)]. Upon implementation of the project, most of the permit requirements were violated. Local fill material was used that contained high amounts of fine sediment, silt fences were absent or minimally placed, little mulch or hay bales were used, and grass and vegetation were planted only after significant erosion occurred. Significant erosion occurred during and after the crossings were in place, violating multiple laws and permits. While several visits were made by WDFW, DNR and DOE, no enforcement actions were taken. DNR was onsite often, but ignored obvious sediment delivery locations. To highlight to the State the need to conduct enforcement monitoring, the Makah Tribe monitored the site periodically with pictures, a continuous turbidity gage, and turbidity grab samples above and below the crossings. Figure 1 below shows a doubling of turbidity values above and below the crossings during a small fall rainstorm. All turbidity measurements used triplicate samples and approved EPA techniques for turbidity measurements. No actions were taken even after these data were showed to DNR, WDFW, or DOE.

Figure 1 Turbidity at Ellis Creek, 10/08/04 13:00

- **fp2606214: Big River Tributaries**

Access to this harvest unit was along a river parallel road that crossed over ten type-5 streams that directly fed into fish habitat in Big River or on its floodplain. These streams and their sediment feed into a section of Big River that is struggling to support the one of the few populations of Threatened Sockeye Salmon that exists in Big River, which spawn just above Solberg Creek. After site visits by the DNR, DOE and Tribes, the operation was given a notice to comply by DNR for cutting over improperly typed waters and excessive sediment delivery and was ordered to implement BMP's post impact. Several BMP's were implemented (several extra culverts and few sediment traps), but significant BMP's were not implemented to stop sediment delivery. Operations were voluntarily suspended for the winter, but the site was left in poor condition to stop winter sediment delivery. During fall spawning surveys walking up streams, the Makah Tribe noticed continued and significant sediment delivery to Big River.

To highlight to the State the need to conduct enforcement monitoring, the Makah Tribe monitored turbidity levels walking up these type-5 streams above and below the road crossings. Significant pollution was document during several events, with turbidity values increasing three fold in places downstream (DS) of crossings as compared to upstream (US) (Figure 2). All turbidity measurements used triplicate samples and approved EPA techniques for turbidity measurements. No further enforcement actions were taken even after these data were showed to DNR and DOE, and the sites continued to pollute throughout the winter to present.

Figure 2 Turbidity at Big River Tributaries

- **Upper Hoko River 9000 Road**

Lack of maintenance and sediment delivery enforcement on this road epitomizes the cumulative sediment delivery problems from roads in the Makah U&A and how DNR is does not have the wherewithal to enforce forest practice law and protect public habitat resources.

Winter 2003/2004 was a moderate rainfall winter with a wet fall and freeze-thaw conditions mid-winter. This road system received moderate to heavy haul during this period and suffered significant degradation and sediment production as a result. The worst offending section of road is stream parallel with deep fills and limited cross-drains that deliver directly to the Hoko River. Road rock quality has been identified as issue on this road segment going back to the 1980's, as indicated by Makah Fisheries files and letters.

By mid-January, it was apparent that this road systems had moved past the point of suitability for log haul if it was also to maintain low (or zero) sediment production for resource protection. Direct suspended sediment concentrations (SSC) inputs to local waterways were visually obvious and turbidity levels easily exceeded 5 NTU's above background, with common daily turbidity increases approaching an order of magnitude increase (i.e., 100 NTU) above background. Peak turbidity values were as much as 5000 NTU's above background. These values were actually measured by DOE on several occasions. Fresh layers of sediment deposition could be observed along the streambed and along channel margins, especially under bridges protected from rain splash. Turbidity levels above 50 NTU's commonly impair salmonid health (Bash et al. 2001) and fine sediment levels in spawning grounds in Makah U&A watersheds are chronically high (McHenry et al. 1994).

In other DNR Regions of the State, these road conditions would be deemed unsuitable for proper resource protection and would likely have been immediately shut down by the FPF until a full evaluation and corrective measures were taken, or the road dried out for cleaner haul. Instead of shutting down haul until the situation could dry out or be fully remedied, Olympic DNR bowed to timber companies wishes to continue haul by applying several new layers of rock to the road prism.

Many dozen visits by many DNR personnel were conducted, all of which allowed continued haul while attempting to maintain overwhelmed sediment traps and silt fences and ditch outs. Thus, DNR actively allowed haul to continue. However, these BMP's are a last resort to control sediment on any road system, and by no means should they be used as the primary lines of defense. The facts that the road was stream adjacent, had erosive cut banks and fill, had too few cross-drains, consisted of extremely poor sub-surface and surface material, and was experiencing heavy haul during wet weather should have been enough to shut the road down for winter. However, as one DNR employee stated, they could not shut the road down due to fear of community repercussions over the "loss of jobs" and that fish health and habitat needed to take a back seat. Meanwhile, the Makah Tribe's Hoko Chinook and Chum populations are struggling with recovery, as is the Tribe's fisheries economy surrounding these local fish.

This 9000-road situation is an excellent example of "groupthink" by DNR and the landowner. This groupthink lead toward the tendency for the group to strive for consensus and avoid critical examination of the situation or alternatives. The obvious and correct decision would have been to shut the road down from the beginning, and search for a long-term solution. It was not until the group membership changed, with DOE's involvement, that these long-term solutions were considered.

As it turns out, the additional rock put on the road was of worse quality compared to the original rock, and additional wet weather haul delivered even more fine sediment. Thus DNR and the landowner made the situation worse. Eventually, DNR never gave a Stop Work Order, but the landowner agreed to stop haul under heavy pressure and negotiations from DOE, and potential bad publicity. The company has declined the option of paving the worst section of the road, and instead is considering relocating over 10,000 feet of the road to a ridge top nearby, which still contains potential sediment delivery locations and may or may not be successful. Relocating the road is a positive step, as long as it is a successful and clean solution and that we are not trying to solve road problems by building more road.

Unfortunately, once most of the timber has been hauled out of these multiple FPA regions of these watersheds, these issues wane as traffic is

reduced, ditches revegetate, and delivery is reduced. However, by then, the impacts have already occurred and are quickly forgotten. Then, the dysfunctional road maintenance process begins again in a different region of the forest. DNR must emphasize the need to preemptively prepare roads for wet weather haul or restrict wet-weather haul on some road networks. Adding extra surface material and traps mid-haul are not enough. These tactics are used by industrial landowners to minimally invest in the road systems until they are rarely forced to comply, with the impact burden falling on aquatic resources rather than the land manager.

Bash, J., Berman, C., and Bolton, S. 2001. Effects of Turbidity and Suspended Solids on Salmonids. University of Washington, Center for Streamside Studies: http://depts.washington.edu/cssuw/Publications/Salmon%20and%20Turbidity.pdf Seattle, WA.

McHenry, M.L., Morrill, D.C., and Currence, E. 1994. Spawning Gravel Quality, Watershed Characteristics and Early Life History Survival of Coho Salmon and Steelhead in Five North Olympic Peninsula Watersheds. Lower Elwha S'Klallam Tribe, Makah Tribe, Port Angeles, WA.

- **Culverts and Sediment: Hundreds of examples across Makah U&A**
  Due to ongoing Forest Practice activity and the requirements of the RMAP process to update culvert sizing on non-fish streams and fix fish blockages, culverts are more frequently being either removed completely or more commonly replaced with larger culverts. While culvert replacement is beneficial to increasing fish habitat availability, these projects are not without significant adverse impacts to the fish resource.

  The common situation with old culverts is that they restrict sediment transport and trap accumulations of fine and coarse sediment behind them in the form of a sediment wedge, which vary greatly in size. Common practice in the Makah U&A is to pull or replace culverts and allow this material to flush/erode downstream and rework itself naturally through stream profile re-grading. Depending on the location, sediment wedges have variable amounts of both coarse (gravel and cobble) and fine (sand, silt, clay) sediment. Some reworking and re-grading of coarse sediment is essential to maintaining a long-term stable profile for passage of fish. However, the release of fine sediment downstream can have significant impacts on both water quality (turbidity) and spawning habitat. In many cases, fine sediment behind old culverts is a partial result of poor forest practices in the past and the associated erosion or mass wasting, and thus constitutes an un-natural source of sediment into the future.

  The other common situation with culvert removals or replacement projects is that the old fill material, let alone the sediment wedge, is not fully removed. The partial removal attitude is prevalent (i.e., "good enough") and accepted by many regulators. This remaining fill material is often reworked, eroded, and transported downstream.

WDFW regularly permits culvert replacements *without* BMP's to address downstream transport of fine sediment from wedges. DNR and DOE also regularly do *not* enforce water quality laws at these culvert locations (e.g., turbidity not to exceed 10% above background). Most if not all culvert replacement projects thus are blatant violations of sediment water quality standard, as the area upstream of the culvert and sediment wedge represents background conditions and the area downstream represents impact areas. More importantly, as more and more culverts are being replaced due to legal requirements, but without BMP's, the cumulative effects of increased sediment levels on downstream fish habitat could be severe. Observations in the Makah U&A indicate that instream sediment levels are on the rise, and could partially be a result of many culvert replacements.

The best solution to mitigating sediment wedge erosion impacts is excavation and end hauling of the majority of the sediment wedge. Often this is an easy extra step and cost effective, and could easily be required as the appropriate BMP. On the most common streams and culverts on the landscape (Type 4 and 5's), the entire sediment wedge could be removed. At larger fish crossings, it may be impossible and unrealistic to excavate all the material from a wedge; however excavation of the finest portion of the wedge is possible in many situations. Often the coarsest material is located near the upstream end of the wedge, which is important material for profile re-grading. The finest portion is located down near the culvert entrance, which is the easiest and best material to excavate. During culvert replacement with an excavator on site, minimal extra time would be needed to excavate a significant portion of the fine wedge, especially where a machine could reach. Typically a dump truck is also available on site.

- **fp2605939: Windthrow and Sediment Production**
  This FPA severs as just one example of the enormous problem of windthrow and sediment production in the Makah U&A. Due to extremely windy climate conditions on the coast and small regulatory buffers on type-4 streams, a majority of type-4 buffers blow down, creating an enormous source of fine sediment from exposed root masses. While these down trees provide a stabilizing feedback effect on slope stability and coarse sediment retention, they do little to retain fine sediment. Since type-4 streams are very numerous on the landscape, these windthrow areas provide a large source of cumulative fine sediment to downstream fish bearing waters.

  Timber companies often cite these numerous blow-downs and windthrow as an example of a waste of timber and a source of fine sediment, and thus the need to log these small buffers. In reality, better design of RMZ to

better resist windthrow is desperately needed, which should include more variable but wider buffers, as supporting science indicates.

TRIBAL/WDNR FOREST PRACTICES TEAM MEETING
FACT FINDING PROJECT
Prepared By: Makah Fisheries Management

FPA Number	Date of Activity	Forest Practice Type	Drainage Basin	Issues or violations
2600568	March 1998	Road Building and Clearcut	Unnamed tributary 19.0189 Hoko Watershed	Riparian Zone Violation

This forest practice is along approximately 2,400 feet of Type-2 stream, which enters the Hoko River as a left bank tributary at river mile 17.6. The lower 1000 feet of the stream is a T-2 greater than 20 feet wide, while the upper 1,400 is a T-2 less than 20 feet wide. Salmonid species present include coho salmon, resident and sea-run cutthroat trout, as well as steelhead.

History of FPA# 2600568

DATE	Action or Event
3-27-97	Crown Pacific applies for forest practice
4-24-97	Field review with Jim Huering (DNR) and Brett Freeman (Crown), stream appeared to be a T-2. I volunteered to come back and type the tream following DNR protocol. We discussed perched pipe along the mainline (acting as a partial barrier, perched above pool four feet) and DNR stated that the pipe needed to be replaced, Crown Pacific said they would replace pipe during harvest of unit.
4-25-97	Forest practice application approved.
5-5-97	Returned to stream 19.0189 and typed stream. Determined stream was a T-2.
5-6-97	Called Crown Pacific on stream typing along 19.0189
5-6-97	Called Jim Huering and Jim Springer on stream typing along 19.0189 and Ossert Creek. We spoke about the fact that Crown Pacific was challenging my data.

5-8-97	Spoke with Jim Huering about the 5900 mainline (upper Hoko River mainline, haul route to 19.0189 and 19.0188) sediment delivery and RMZ violations along 19.0188[1], as well as my interactions with the landowner.

DATE	Action or Event
5-8-97	Spoke w/Mike McHenry (Elwha Tribe) about stream typing problem with Crown Pacific and stream 19.0189.
5-8-97	Called Crown Pacific and spoke with Dan Monahan about stream type and buffering along 19.0189.
5-9-97	Crown Pacific consultant types stream as a Type 2.[2]
5-12-97	Completed data entry on stream type change for 19.0189, this included: length, width, and spawn survey data.
5-16-97	Sent my data to Crown Pacific. Spoke w/Steve Dauma (WDFW) on stream typing issues and electro-fishing and Tribal access to landowners data collected under a Scientific Collection Permit. Land owner still challenging stream typing but would not reveal their data.
6-6-97	Met w/Dan Christensen (DNR) and Dan Monahan (Crown Pacific) at the Sappho work-center. Went over stream typing changes across their ownership, which included 19.0189 and Ossert Creek. Determined that these streams were Type 2 streams. Landowner gives stream typing maps to DNR.
6-19-97	Met/DNR staff (Dan Christensen, Jim Springer, Jim Huering, Phil Frieze, and Beth Spelberg) at Neah Bay. Issues discussed included acceptance of our stream typing data, but meeting mostly focused on watershed analysis and road maintenance plans.
Sept.-97	Makah Tribe formally appeals Hoko Watershed Analysis (HWA).
10-7-97	HWA appeal hearing in Seattle. Tribe meets w/State agencies and landowners.
10-27-97	HWA appeal meeting, work-group revised HWA prescriptions.
Nov. - 97	Tribes dismiss appeal after landowners agree to new prescriptions.

[1] I still haven't gotten a response after almost two years and several attempts to resolve issues related to harvest along this stream.
[2] This information was not shared with us until June 6, 1997.

DATE	Action or Event
3-6-98	Met/DNR and Crown Pacific and looked at harvest units along Johnson Creek[3] and stream 19.0189. Unit along 19.0189 was actively being harvested along stream. We found that the riparian zone had numerous fresh conifer stumps in it that were trees>16"dbh. Hoko Prescriptions indicate that along this 1,000 foot length of stream that post harvest tree requirements should have been roughly 230 conifers >16"dbh. We struggled to count 72 trees. Crown Pacific admitted that buffer didn't appear to meet prescriptions.
3-12-98	Ray Jones (Vice President of Crown Pacific) comes up from Oregon to see the extent of recently identified violations. We meet w/Crown, DNR, and Elwha Tribe to look at extent of violations. We first travel to Johnson Creek where we find RMZ violations along the mainstem and no RMZ's left along three Type 3 tributaries, as well as no RMZ along Type 2 tributary. We find several locations where a skidder/shovel had been operating within the Type 2 and 3 waters. After this landowner doesn't want to look at unit along 19.0189 and insists that it may not be "safe". Instead they take us to stream 19.0188 and show us an example of their compliant RMZ. While there I located two riparian violations one of which is mentioned within footnote 2, while the second violation may be less severe and is related to a non compliant RMZ along off-channel habitat and failure to identify and adequately protect the CMZ.
6/97-6/98	DNR fails to change water type map. Even though they received data and maps from both Crown Pacific and the Makah Tribe during the spring of 1997.
6-8-98	Unclear what DNR did with the stream type information up to this date. Dan Christensen sponsors stream type change from T-3 to T-2.
9-3-98	DNR updates stream type map with Type-2 change.
9-14-98	DNR sends letter to Makah Tribe contradicting the 6-8-98 stream type change and 9-3-98 updated stream type map. The letter states that, "Specifically, FPA 2600568 involves a Type 3 tributary to the Hoko River." The letter further reads, "it was apparent that a few large diameter

[3] Johnson Creek units contain at least 5 major violations forest practice violations, as well as hydraulic code violations.

	conifer were favored for removal over smaller diameters immediately adjacent to them."[4]
3-24-99	To date we have had several discussions about FPA 2600568, but nothing has been resolved. My understanding is that DNR believes that since an old stream typing map had the stream listed as a T-3 stream that the landowner is not required to follow the prescriptions for a T-2 stream.

FPA Number	Date of Activity	Forest Practice Type	Drainage Basin	Issues or violations
2600493?? 2600xxx 2600032	summer-fall 97	Road Building and Clearcut	Johnson Creek and unnamed tributaries Hoko Watershed	RMZ Violations, fine sediment delivery, and operating if fish bearing waters

Forest practice violations along Johnson Creek are distributed between two or three separate forest practice applications. Collectively, timber harvest occurred along approximately 3,000 feet of Type 1/2 mainstem habitat, four Type 3 streams, and one Type 2 fish bearing forested wetland. Salmonid species present include coho salmon, sea-run and resident cutthroat-trout, and steelhead. Johnson Creek is the most productive coho system within the Hoko watershed. Coho escapement in 1998 exceeded 250 fish/mile within a couple of miles of the most productive habitat.

DATE	Action or Event
8-25-96	FPA is approved with conditions to follow HWA riparian prescriptions.
8/96-10/97	Portions of application are altered from a partial cut to a clear cut. Our records are poor during this period because our TFW position is vacant during a portion of this period.
11/97	While conducting coho surveys in Johnson Creek we notice several fish bearing tributaries to Johnson Creek lacked RMZ protection. There were also signs of equipment operation within the channels.
3-6-98	Met/DNR and Crown Pacific and looked at harvest units along Johnson Creek. We find that Hoko riparian prescriptions were not followed along the mainstem of Johnson Creek (Type 1 and 2 water, water type change within the harvested units[5]), that three Type 3 streams were harvested along with no riparian protection, that at least one Type 3 stream was operated in without a permit, and that no RMZ was left along Type 2 off-

[4] This is not an issue of a few large trees. At a minimum more than 40% of the minimum RMZ was harvested.

[5] RMZ prescriptions in the Hoko are the same for Type 1 and 2 water greater than 20 feet wide.

channel habitat and fish bearing forested wetland and that the Type 2 water was operated in. The day of our visit we find numerous emergent coho fry in skidder trails within Type-2 waters. We also found that the upland timber harvest resulted in skidder trail connectivity to the ditch line, which had no cross drains. This resulted in formation of a delta of fine sediment within the mainstem Johnson Creek where dozens of coho were trying to spawn (Johnson Creek is a Type 2 stream and was mapped as a Type 3, our evaluation to date on this section of stream has been based on a Type 3 water. If we pushed the stream type issue for this stream there would have also been violations associated with it[6]).

DATE	Action or Event
3-12-98	Ray Jones (Vice President of Crown Pacific) comes up from Oregon to see the extent of recently identified violations. We meet w/Crown, DNR, and Elwha Tribe to look at extent of violations. We review portions of what was seen on 3-6-98.
3/98-12/98	DNR issues one civil penalty on one violation with respect to the lower mainstem riparian protection. I have informally requested a copy of these documents on three occasions, and have yet to receive one.
7-31-98	We visit N.F. Herman Creek and the mainstem Herman Creek and find minor violations along these streams. We also visit the RB side of the lower mainstem Johnson Creek where it appeared that a moderate level of non-compliance with HWA riparian prescriptions had occurred. DNR compliance audit states, "...all but a small portion was compliant. Four of the larger conifer had been removed from the outer extremities of the 50 feet to 100 feet RMZ width". I state to DNR that I didn't think the potential violations along Herman Creek were worthy of pursuing since there appeared to be at least 9 recent violations within the Johnson Creek watershed and unresolved issues with harvest along stream 19.0189.
11-13-98	We met w/Landowner and explained our perspective on violations relating to harvest along Sekiu River mainstem and tribs, Johnson Creek watershed, 19.0189, 19.0188, unnamed trib to Hoko, etc... We explain that any form of mitigation needs to be consistent with the magnitude of past non-compliance and that in order to move forward we need to deal with issues both in the recent past and in the present.
12-16-98	We met with DNR, WDFW, Landowner, and Elwha Tribe to discuss potential mitigation projects.
To date	We have talked about several mitigation opportunities to deal with the civil penalty issued by DNR for timber harvest along the left bank of the lower mainstem of Johnson Creek. We have continued to state that in

[6] Note that the vast majority of conifer was outside of the 50 foot buffer and therefore harvested. Hoko prescriptions state that the conifer should have been left out-to 70 feet.

order to participate in *any* form of mitigation in lieu of a civil penalty, all of the issues relating to Johnson Creek and tributary 19.0189 need to be addressed. Furthermore, DNR has not formally stated their position on other violations along Johnson Creek, nor have they adequately evaluated timber harvest along tributary 19.0189. We again are at an impasse and feel that these issues must be addressed by DNR and that our experience over the last 5 years has shown that Olympic Region is unwilling to exercise their legal authority and obligation to protect public resources.

FPA Number	Date of Activity	Forest Practice Type	Drainage Basin	Issues or violations
2601241 2601268	summer 98	Road Building and Clearcut	Boe Creek and unnamed tributaries Big River/Ozette Watershed	RMZ Violations

Forest practice violations along Boe Creek occurred along 1,200 feet of Type 2 mainstem habitat which was misidentified as Type 3 habitat[7], and about 1,000 feet of Type 3 tributary habitat, as well as it's associated off-channel habitat. Boe Creek is the most productive coho system within the Makah U&A. We estimate that 1998 coho spawning densities within Boe Creek were about 350 fish/mile during. Salmonid species currently present include coho salmon, resident and sea-run cutthroat-trout, as well as steelhead. We believe that historically this stream was also used by sockeye salmon.

DATE	Action or Event
1-22-98	DNR approves FPA# 2601241. Application states that no trees will be removed from the maximum RMZ, and there will be no operation within 50 feet of fish-bearing waters.
2-8-98	DNR approves FPA# 2601268. Application states that no trees will be removed from the maximum RMZ.
2-23-98	Met with Crown Pacific and WDFW to review applications and determine which tributaries contained fish and their widths. Harvest unit boundaries along the mainstem of Boe Creek averaged 15-20 feet. When asked about buffer widths, Crown Pacific said that they intended on leaving a 50 foot

[7] Our compliance evaluation is based on Type 3 water for the mainstem, since we were unable to clearly demonstrate the upper extent of Type 2 water.

	no-cut along the entire length of the harvest unit. We responded that that would be a good idea because we did not know the upper extent of Type-2 waters. We then identified where the Type-3 tributary became greater than 5 feet in width. I then walked this tributary to the confluence with Boe Creek and identified associated off-channel habitat. I then explained to the landowner where the off-channel habitat occurred and they said it would be appropriately protected[8].
12-1-98	We observed high levels of sediment in tributary to Boe Creek due to haul on the 650 road which was decreasing visibility in Boe Creek and Big River to a few inches.

[8] We assumed this meant no timber harvest within the maximum RMZ width, as stated by the landowner and the FPA.

DATE	Action or Event
12-3-98	While conducting supplemental coho surveys on upper Boe Creek and tributary we noticed that the 50 foot no-cut RMZ was that was stated in the FPA and talked about in the field was not implemented. RMZ along the mainstem of Boe Creek where harvest occurred averaged 15 feet. The RMZ boundary that we reviewed on 2-23-98 was never adjusted and numerous trees were harvested between the boundary and the stream. Trees growing within the banks of the channel were harvested as well as trees on the opposite side of the stream (notably, the largest tree in the drainage) and yarded across and through the stream. Post harvest RMZ widths averaged 20 feet along the Type-3 tributary and the Type-2 waters that were identified on our field visit were not protected.
12-3-98	Talked with landowner about our observations along Boe Creek. I voiced our concerns at this time.
12-7-98	Spoke with Tim Rymer (WDFW) about our observations along Boe Creek.
12-7-98	Spoke with Dan Christensen about the severity of violations we found along Boe Creek, and scheduled a field day for compliance review. Also talked about our inability to conduct spawn surveys in Umbrella and Trout creeks this year due to extremely high levels of turbidity from roads and skidder trails. I also informed him of the problems with fine sediment delivery to Boe Creek related to the 650 road.
12-10-98	Our records are unclear on whether our compliance review was on the 10th or 11th. Met with Crown Pacific, DNR, and WDFW to review post-harvest compliance along Boe Creek. Our observations were no different than what was found on 12-3-98. We also reviewed road problems along the 650 road where heavy haul had been introducing sediment into a tributary to Boe Creek which, on occasion, was reducing visibility to a few inches in Boe Creek. We then went to Umbrella Creek where we found extremely poor road conditions, as well as a skidder trail channelizing road runoff into an 8 foot wide, 2 foot deep mud cascade which directly delivered *tons* of fine sediment on top of a sockeye redd[9]. Upon leaving Umbrella Creek on the 27E mainline we found that road conditions were so poor they were barely passable. Sediment delivery due to poor road maintenance, rock surfacing, and heavy haul was so extreme that Trout Creek appeared to have the viscosity of evaporated chocolate milk. We feel that the frequency, magnitude, and duration of sediment input into Trout Creek severely affected any coho egg survival. Subsequent coho fry

[9] Sediment delivery onto sockeye redd was determined by the fact that the redd had been previously identified and marked in the field.

DATE	Action or Event
12-10-98	surveys revealed 4 fry over a 1 hour, quarter mile search, while high densities of coho fry were observed elsewhere within the Ozette watershed.
To date	There have been no formal or informal actions taken by DNR with respect to RMZ violations along Boe Creek. Formal enforcement actions taken by DNR as a result of our findings in Umbrella and Trout Creek are an insult to our attempts to protect, restore, and recover our fisheries within the Ozette drainage. I have informally requested information pertaining to enforcement actions taken at Umbrella and Trout creeks, and have yet to receive any information other than what was published in the Peninsula Daily News. I would like to understand the rationale for any and all determinations made by DNR with respect to the aforementioned enforcement actions.